

demetallization--.

Page 14,

lines 5 and 8: delete "unfavorably" at each occurrence.

Page 15,

line 2: delete "unfavorably"; and

line 19: delete "kerosines" and insert therefor --  
kerosenes--.

Page 20,

line 23: delete "demetalizing" and insert therefor --  
demetallizing--.

**IN THE CLAIMS:**

Please amend claims 1 and 10 as follows:

1. (**Amended**) A reactor for hydrotreating, which comprises at least four catalyst layers packed respectively with hydrotreating catalysts, with said layers satisfying the relationship represented by the following formulae:

$$S_n \leq S_{n+1} \quad (1)$$

$$1.15V_n \geq V_{n+1} \quad (2)$$

wherein S represents the surface area per cubic meter of each hydrotreating catalyst layer; V represents the pore volume per cubic meter of each catalyst layer; and wherein n is a natural number representing the order of each catalyst layer.

10. (Amended) A process for producing an ultralow sulfur heavy oil, which comprises using a reactor for hydrotreating which contains at least four catalyst layers packed respectively with hydrotreating catalysts, with said layers satisfying the relationship represented by the following formulae:

$$S_n \leq S_{n+1} \quad (1)$$

$$1.15V_n \geq V_{n+1} \quad (2)$$

wherein S represents the surface area per cubic meter of each hydrotreating catalyst layer; V represents the pore volume per cubic meter of [the] each catalyst layer; and wherein n is a natural number representing the order of each catalyst layer, and passing a heavy oil through the first to the last catalyst layers successively to thereby bring the heavy oil into contact with hydrogen gas under hydrogenation conditions in each catalyst layer.

Add the following new claims 15-18: